

Annals of Neurology

Vol 9 January June 1981

Official Journal of the American Neurological Association and the Child Neurology Society



Editor

Fred Plum, MD, New York Hospital-Cornell
Medical Center, New York

Associate Editor

John J. Caronna, MD, New York

Editor for Medical Progress

Robert B. Daroff, MD, Cleveland

Editorial Board

Albert J. Aguayo, MD, Montreal
Stanley H. Appel, MD, Houston
William E. Bell, MD, Iowa City
John E. Desmedt, MD, Brussels
Darryl C. DeVivo, MD, New York
Paul R. Dyken, MD, Augusta, GA
Andrew G. Engel, MD, Rochester, MN
James A. Ferrendelli, MD, St. Louis
Floyd H. Gilles, MD, Boston
Sid Gilman, MD, Ann Arbor
Gerald S. Golden, MD, Galveston
James W. Lance, MD, Sydney, Australia
Joseph B. Martin, MD, Boston
Michael B. A. Oldstone, MD, La Jolla
Marcus E. Raichle, MD, St. Louis
Herbert H. Schaumburg, MD, Bronx
Donald H. Silberberg, MD, Philadelphia
Kenneth F. Swaiman, MD, Minneapolis
Robert D. Terry, MD, Bronx
James F. Toole, MD, Winston-Salem
John N. Whitaker, MD, Memphis
Jerry S. Wolinsky, MD, Baltimore

Publisher

Little, Brown and Company, Boston

Manager, Medical Journals

Nancy H. Megley

ISSN 0364-5134

Published monthly by Little, Brown and Company, 34 Beacon Street, Boston, MA 02106. All rights reserved. Except as authorized in the accompanying statement, no part of *Annals of Neurology* may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval systems, without the publisher's written permission. Subscription rates per year: United States and possessions \$42.00; Canada \$43.00; elsewhere \$45.00. Special rates for students, interns, and residents per year: United States and possessions \$32.50; Canada \$33.50; elsewhere \$35.50. Institutional rates per year: United States and possessions \$47.00; Canada \$48.00; elsewhere \$50.00. Single copies \$5.00 prepaid. Second-class postage paid at Boston, MA, and at additional mailing offices. Copyright © 1981 by the American Neurological Association. POSTMASTER: Send address changes to *Annals of Neurology*, 34 Beacon St, Boston, MA 02106.

The appearance of the code at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per-copy fee through the Copyright Clearance Center Inc., for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Beginning January 1, 1978, copying fees will be charged for material previously published in this journal according to fee rates on file with the Copyright Clearance Center, Inc.

- 1 Message from the Editor
Fred Plum, MD

Neurological Progress

- 3 Epilepsy in Adults
Elson L. So, MD, and J. Kiffin Penry, MD

Editorial

- 17 Measles Virus and
Chronic Neurological Diseases
Purnell W. Choppin, MD

Original Articles

- 21 Encephalitis after Inhalation of Measles Virus:
A Pathogenetic Study in Hamsters
*Irma M. Parhad, MD, Kenneth P. Johnson, MD,
Jerry S. Wolinsky, MD, and Peggy Swoveland, MS*
- 28 Analysis of Leukocyte Adherence
to Measles-infected Cells in Multiple Sclerosis
*B. P. Barna, PhD, H. Goren, MD, B. Jacobs, BS,
J. Conomy, MD, and S. D. Deodhar, MD, PhD*
- 34 Comparison of Agar Gel Electrophoresis
and Isoelectric Focusing in Multiple Sclerosis
and Subacute Sclerosing Panencephalitis
*David H. Mattson, BA, Raymond P. Roos, MD,
and Barry G. W. Arnason, MD*
- 42 Brainstem Auditory Evoked Responses in
Spinocerebellar Degeneration and Wilson Disease
*Masashi Fujita, MD, Masako Hosoki, MT,
and Motoji Miyazaki, MD*
- 48 Lisuride in Parkinsonism
*J. D. Parkes, MD, M. Schachter, MB,
C. D. Marsden, MSc, B. Smith, MSc,
and A. Wilson, MSc*
- 53 Essential Tremor Treated with Propranolol:
Lack of Correlation between Clinical Effect
and Plasma Propranolol Levels
*Per Soelberg Sørensen, MD, Olaf B. Paulson, MD,
Eva Steiness, MD, and Erik C. Jansen, MD*
- 58 Hand Wasting in Spondylotic High Cord
Compression: An Electromyographic Study
*Richard J. Stark, MB, BS, FRACP,
Christopher Kennard, PhD, MRCP,
and Michael Swash, MD, FRCP*
- 63 Somatosensory Evoked Potentials
following Trigeminal Nerve Stimulation
in Trigeminal Neuralgia
M. Stöhr, MD, F. Petrucci, MD, and K. Scheglmann
- 67 Nerve Fiber Conduction Velocity Distributions:
Studies of Normal and Diabetic Human Nerves
Kenneth L. Cummins, PhD, and Leslie J. Dorfman, MD

Brief Communications and Case Reports

- 75 Diabetic Thoracoabdominal Neuropathy:
Clinical and Electrodiagnostic Features
Sallie F. Sun, MD, and Erich W. Streib, MD

- 79 "Wrong-Way Eyes"
in Supratentorial Hemorrhage
*Michael S. Pessin, MD, Lester S. Adelman, MD,
Robert J. Prager, MD, Ellen S. Latbi, MD,
and Dale J. Lange, MD*

- 81 Postictal Pleocytosis
James W. Schmidley, MD, and Roger P. Simon, MD

- 84 Parkinsonism Provoked by Alcoholism
*P. L. Carlen, MD, FRCP(C), M. A. Lee, MD, FRCP(C),
M. Jacob, MD, FRCP(C), and O. Livshits, MD*

- 87 Spinocerebellar Degeneration
with Parkinsonian Features: A Clinical
and Pathological Report
Roger L. Weir, MD, and Kuang J. Fan, MD

- 89 Measurement of Early Spontaneous Recovery
from Aphasia with Stroke
Jacqueline Hartman, MA

Letters

- 92 Recovery following Brainstem Hemorrhage
*J. M. Vallat, MD, C. Poumier, MD,
D. Demarti, MD, and M. Dumas, MD*
- 92 Estrogens and Migraine
Hanna Damasio, MD, and James J. Corbett, MD
- 93 Arsenic and Antique Copper: A Potential
Source for Intoxication and Development
of Peripheral Neuropathy
H. Royden Jones, Jr, MD
- 93 Normal Muscle Pyruvate Oxidation
in Spinocerebellar Degenerations
Owen B. Evans, MD
- 94 Measurement of Erythropoietin Levels
in Follow-up of Patients with Cerebellar
Hemangioblastoma
*Linda Pololi-Anagnostou, MRCP,
and Athanasios Anagnostou, MD*
- 95 Costs of Anticonvulsant Therapy
Mark A. Goldberg, MD, PhD
- 95 Absence of REM Sleep in Patients with
Spinocerebellar Degeneration and Slow Saccades
*J. Masdeu, MD, S. Chokroverty, MD,
and P. Gorelick, MD*
- 96 Dissociated Quadriceps-Hamstring Weakness:
A Clue to the Clinical Diagnosis
of Guillain-Barré Syndrome
Elmo F. Masucci, MD, and John F. Kurtzke, MD
- 97 Lithium Carbonate in Pseudobulbar Palsy
E. Wayne Massey, MD, and Stephen Lowe, MD
- 98 Barognosis in Hemiataxia
William M. Landau, MD
- 98 Reply
Ronald W. Angel, MD
- 99 Books

Regular Departments

Neurological Progress

- 101 **Pain II: New Approaches to Management**
Howard L. Fields, MD, PhD

Original Articles

- 107 **Intracranial Infection in Cardiac Transplant Recipients**
Richard H. Britt, MD, PhD, Dieter R. Enzmann, MD, and Jack S. Remington, MD
- 120 **Experimental Viral Infections of the Facial Nerve and Geniculate Ganglion**
Larry E. Davis, MD
- 126 **Vestibular Testing in Basilar Artery Migraine**
Lydia Eviatar, MD
- 131 **The Influence of Immaturity on Hypoxic-Ischemic Brain Damage in the Rat**
John E. Rice, III, BS, Robert C. Vannucci, MD, and James B. Brierley, MD
- 142 **Clinical and Electroencephalographic Characteristics of Midline Parasagittal Foci**
Timothy A. Pedley, MD, Barry R. Tharp, MD, and Kathleen Herman, R EEG T
- 150 **Periodic Synchronous Discharge and Myoclonus in Creutzfeldt-Jakob Disease: Diagnostic Application of Jerk-locked Averaging Method**
Hiroshi Shibasaki, MD, Satoru Motomura, MD, Yoriaki Yamashita, MD, Hiroaki Shii, MD, and Yoshigoro Kuroiwa, MD
- 157 **Vascular Adrenergic Receptor Responses in Skeletal Muscle in Myotonic Dystrophy**
F. Mechler, MD, and F. L. Mastaglia, MD
- 163 **An Ultramicroscopic Study of Skin and Conjunctival Biopsies in Chronic Neurological Disorders of Childhood**
M. L. Arsenio-Nunes, MD, F. Goutières, MD, and J. Aicardi, MD
- 174 **Ultrastructure of Tuberous Sclerosis: Cortical Tuber and Subependymal Tumor**
Irene K. Trombley, MD, and Suzanne S. Mirra, MD

Brief Communications and Case Reports

- 182 **Antidiuretic Hormone Levels in Stroke Patients**
Robert J. Joynt, MD, PhD, John H. Feibel, MD, and Celia M. Sladek, PhD
- 185 **Demyelination of the Lateral Geniculate Nucleus in Central Pontine Myelinolysis**
James E. Goldman, MD, PhD, and Dikran S. Horoupian, MD, FRCP(C)

- 189 **Blepharospasm and Oromandibular Dystonia (Meige's Syndrome) in Sisters**
John G. Nutt, MD, and John P. Hammerstad, MD

- 191 **Myoclonic Seizures following Chlorambucil Overdose**
Thomas N. Byrne, Jr, MD, Thomas A. E. Moseley, III, MD, and Michael A. Finer, MD

- 194 **Inverse Ocular Bobbing**
Robert L. Knobler, MD, PhD, Mahendra Somasundaram, MD, and Henry S. Schutta, MD

Notes and Letters

- 198 **γ -Hydroxybutyrate in Narcolepsy**
P. A. Price, MB, M. Schachter, MB, S. J. Smith, R. C. H. Baxter, MB, and J. D. Parkes, MD
- 198 **Staging in Reye Syndrome**
Jerome S. Haller, MD
- 198 **Amantadine in Essential Tremor**
Bala V. Manyam, MD
- 199 **Palatal Myoclonus Responding to Carbamazepine**
Tetsuo Sakai, MD, Satoru Shiraishi, MD, and Shunichi Murakami, MD
- 200 **Clonazepam in Dialysis Encephalopathy**
M. D. Pascoe, MB, ChB, FCP(SA)
- 200 **Brief and Mild Alcohol Intake Can Increase Serum Creatine Phosphokinase**
Daniel S. P. Schubert, MD, PhD, Karen Brocco, MD, Frank Miller, MD, and Marian Patterson, PhD
- 202 **Organization of Microtubules and Microfilaments in Fibroblasts in Duchenne Muscular Dystrophy Muscle Cultures**
Frank S. Walsh, PhD, Rose Yasin, PhD, Kalyan Kundu, PhD, and Edward J. Thompson, PhD, MD
- 204 **Repetitive Impulse-induced EMG Discharges in Neuromuscular Diseases**
M. Stöhr, MD
- 204 **Astereognosis in Brainstem Lesions**
L. J. Endtz, MD, J. J. E. Frenay, MD, and J. J. Groen, MD
- 205 **Effect of Age on CSF Metabolites**
Robert A. Fishman, MD
- 205 **Reply**
Ian J. Butler, MD, and William E. Seifert, Jr, PhD

Regular Departments

- 206 **Books**

Neurological Progress

- 207 **Depth Electroencephalography in Selection of Refractory Epilepsy for Surgery**
Susan Soloway Spencer, MD

Original Articles

- 215 **Correlation of Criteria Used for Localizing Epileptic Foci in Patients Considered for Surgical Therapy of Epilepsy**
Jerome Engel, Jr, MD, PhD, Rebecca Rausch, PhD, Jeffrey P. Lieb, PhD, David E. Kuhl, MD, and Paul H. Crandall, MD
- 225 **G_{M1} Gangliosidosis: Phenotypic Variation in a Single Family**
Donald F. Farrell, MD, and Ute Ochs, MD
- 232 **G_{M1} Gangliosidosis: Enzymatic Variation in a Single Family**
Donald F. Farrell, MD, and Marian P. MacMartin, BS, MT (ASCP)
- 237 **Progressive Sensory Neuropathy in Patients without Carcinoma: A Disorder with Distinctive Clinical and Electrophysiological Findings**
Michael D. Kaufman, MD, Linton C. Hopkins, MD, and Barrie J. Hurwitz, MRCP, FCP
- 243 **Pattern-Reversal Visual Evoked Potentials in the Hereditary Ataxias and Spinal Degenerations**
Thomas D. Bird, MD, and Wayne E. Crill, MD
- 251 **Multifocal Varicella-Zoster Virus Leukoencephalitis Temporally Remote from Herpes Zoster**
Bruce Horten, MD, Richard W. Price, MD, and Daisy Jimenez, BA
- 267 **Abnormal Regulation of In Vitro IgG Production in Multiple Sclerosis**
Robert E. Kelley, PhD, George W. Ellison, MD, Lawrence W. Myers, MD, Vincent Goymerac, BS, Susan B. Larrick, BS, and Carol C. Kelley, BS
- 273 **The Role of Hydrostatic Pressure in Ischemic Brain Edema**
Kyuya Kogure, MD, Raul Busto, BS, and Peritz Scheinberg, MD
- 283 **Glycogen Debrancher Deficiency Is Reproduced in Muscle Culture**
Armand F. Miranda, PhD, Salvatore DiMauro, MD, Adriane Antler, BA, Lawrence Z. Stern, MD, and Lewis P. Rowland, MD

Brief Communications and Case Reports

- 289 **GABA Receptors Are Increased in Brains of Alcoholics**
Vinh T. Tran, MD, Solomon H. Snyder, MD, Leslie F. Major, MD, and Rollin J. Hawley, MD
- 292 **Reduced Glycine Receptor in the Spinal Cord in Amyotrophic Lateral Sclerosis**
Hideaki Hayashi, MD, Masakazu Suga, MD, Mei Satake, MD, and Tadao Tsubaki, MD
- 294 **Galvanic Vestibular Tests in the Assessment of Coma and Brain Death**
Joseph U. Tolia, MD, Rasheed U. Adam, MD, and George Stewart, MD
- 296 **Spinal Cord Infarction Secondary to Intervertebral Disc Embolism**
John R. Strigley, MD, Colin D. Lambert, FRCP(C), Juan M. Bilbao, MD, and Kenneth P. H. Pritzker, MD
- 301 **Evidence for a "Dying-Back" Gliopathy in Demyelinating Disease**
Samuel K. Ludwin, MB, BCh, and Edward S. Johnson, MD
- 305 **Usefulness of Electrophysiological Studies in the Diagnosis of Lumbosacral Root Disease**
Richard F. Tonzola, MD, Albert A. Ackil, MD, Bhagwan T. Shahani, MD, and Robert R. Young, MD

Letters

- 309 **Brainstem Auditory Evoked Responses and Palatal Myoclonus: Cause of AER Abnormalities**
S. Gøthgen, MD, L. Jacobs, MD, and R. P. Newman, MD
- 309 **Auditory Fiber Crossing**
C. Keith Whittaker, MD
- 309 **Reply**
Charles M. Epstein, MD, Richard Stappenbeck, MD, and Herbert R. Karp, MD
- 309 **Low Blood Levels of Phenobarbital Due to Poor Gastrointestinal Solubility of Phenobarbital Tablets**
Norberto Alvarez, MD, Ellen Hartford, RN, and Edward Cavalleri, MS
- 310 **Bilateral Mineral Deposits in Basal Ganglia and Cerebellum**
Meta A. Neumann, MS
- 311 **Cervical Disc Herniation in the Gilles de la Tourette Syndrome**
Charles B. Brill, MD, William H. Hartz, MD, and Elliott L. Mancall, MD

Regular Departments

- 312 **Books**

Neurological Progress

- 313 Treatment of Bacterial Infections
of the Central Nervous System
William E. Bell, MD

Original Articles

- 328 Leukocyte and Bacterial Interrelationships
in Experimental Meningitis
*Casimiro Giampaolo, MD, Michael Scheld, MD,
James Boyd, MD, John Savory, PhD,
Merle Sande, MD, and Michael Wills, MD, PhD*
- 334 The Effect of Thiamine Deficiency
on Local Cerebral Glucose Utilization
A. M. Hakim, MD, PhD, and H. M. Pappius, PhD
- 340 Catecholamine-associated Refractory
Hypertension following Acute Intracranial
Hemorrhage: Control with Propranolol
*John H. Feibel, MD, Claire A. Baldwin, RN,
and Robert J. Joynt, MD, PhD*
- 344 Focal Hyperemia Followed by Spreading
Oligemia and Impaired Activation of rCBF
in Classic Migraine
*Jes Olesen, MD, Bo Larsen, MD,
and Martin Lauritzen, MD*
- 353 Prognostic Indicators
in Hemiparetic Cerebral Palsy
Michael E. Cohen, MD, and Patricia K. Duffner, MD
- 358 Postischemic Hypervascularity of Infancy:
A Stage in the Evolution of Ischemic Brain
Damage with Characteristic CT Scan
*D. Alan Shewmon, MD, Michael Fine, MD,
Joseph C. Masdeu, MD, and Enrique Palacios, MD*
- 366 Asterix and Encephalopathy following
Metrizamide Myelography: Investigations
into Possible Mechanisms and Review
of the Literature
*John M. Bertoni, MD, PhD,
Robert Jay Schwartzman, MD,
Gage Van Horn, MD, and James Partin, MD*
- 371 Multiple Sclerosis Serum
and Cerebrospinal Fluid Immunoglobulin
Binding to Fc Receptors of Oligodendrocytes
*Boo I. Ma, DDS, PhD, Barry S. Joseph, MD,
Michael J. Walsh, MD, Alfred R. Potvin, PE, PhD,
and Wallace W. Tourtellotte, MD, PhD*
- 378 Ectopic Impulse Generation
in Demyelinated Axons: Effects of
 PaCO_2 , pH, and Disodium Edetate
Kim J. Burchiel, MD

- 384 Binaural Interaction
in Brainstem Potentials
of Human Subjects
Robert A. Levine, MD

- 394 Alterations in Creatine Kinase
in Fresh Muscle and Cell Cultures
in Duchenne Dystrophy
*V. Ionasescu, MD, R. Ionasescu, MD,
R. Feld, PhD, D. Witte, PhD,
P. Cancilla, MD, L. Kaeding, BS,
and L. Z. Steiner, MD*

Brief Communications and Case Reports

- 400 Nerve Cell Fusion in a Case
of Subacute Sclerosing Panencephalitis
*M. M. Paula-Barbosa, MD, PhD,
and Celso Cruz, MD, PhD*
- 403 Epilepsy Complicated by Sleep Apnea
Allen R. Wyler, MD, and Ernest A. Weymuller, Jr, MD
- 405 Ataxic Hemiparesis from a Midbrain Mass
Paul E. Bendheim, MD, and Bruce O. Berg, MD
- 407 Evoked Responses in
Vitamin B₁₂ Deficiency
*Allan Krumboltz, MD, Howard D. Weiss, MD,
Phillip J. Goldstein, MD,
and Kenneth C. Harris, EEG T*
- 409 Sustained Upgaze in Coma
James R. Keane, MD

Notes and Letters

- 413 Chronic Relapsing Polyneuritis
Associated with Pregnancy
*M. W. Jones, MD, FRCP(C),
and K. Berry, MD, FRCP(C)*
- 413 Compressive Myelopathy
in Mucopolysaccharidosis
*Clarence E. Ballenger, MD,
Thomas R. Swift, MD,
and Robert T. Leshner, MD*
- 414 Peripheral Neuropathy
Due to Lithium Intoxication
*Masanobu Uchigata, MD,
Hitoshi Tanabe, MD, Ikuo Hasue, MD,
and Masanao Kuribara, MD*

Regular Departments

- 415 Books

Neurological Progress

- 417 Treatment of Fungal Infections
of the Central Nervous System
William E. Bell, MD

Original Articles

- 423 Methioninemia and Myopathy: A New Disorder
*Gerald E. Gaull, MD, Adam N. Bender, MD,
Dimitrije Vulovic, MD, Harris H. Tallan, PhD,
and Fenton Schaffner, MD*
- 433 Induction of Recurrent Experimental Allergic
Encephalomyelitis with Myelin Basic Protein
Hillel Panitch, MD, and Carlo Ciccone, MS
- 439 Autologous Lymphocyte Proliferation
in Multiple Sclerosis and the Effect
of Intravenous ACTH
Gary Birnbaum, MD, and Linda Kotilinek, BS
- 447 Mood Change following
Left Hemispheric Brain Injury
Robert G. Robinson, MD, and Brian Szetela, MD
- 454 Cerebral Blood Flow following Normovolemic
Hemodilution in Patients with High Hematocrit
*Leif Henriksen, MD, Olaf B. Paulson, MD,
and Ronald J. Smith, MD*
- 458 Neurogenic Pulmonary Edema in Unexpected,
Unexplained Death of Epileptic Patients
*Christopher F. Terrence, MD, Guiti R. Rao, MD,
and Joshua A. Perper, MD*
- 465 Chronic G_{M1} Gangliosidosis Presenting as
Dystonia: I. Clinical and Pathological Features
*James E. Goldman, MD, PhD, David Katz, MD,
Isabelle Rapin, MD, Dominick P. Purpura, MD,
and Kinuko Suwa, MD*
- 476 Chronic G_{M1} Gangliosidosis
Presenting as Dystonia: II. Biochemical Studies
Takuro Kobayashi, MD, and Kunihiko Suzuki, MD
- 484 Local Cerebral Glucose Utilization
in Thermally Traumatized Rat Brain
H. M. Pappius, PhD

- 492 Canine Inherited Ataxia
*Linda C. Cork, DVM, PhD, Juan C. Troncoso, MD,
and Donald L. Price, MD*

Brief Communications and Case Reports

- 499 Progressive Neurological Disease Associated
with Chronic Cytomegalovirus Infection
*Patrick F. Bray, MD, James F. Bale, MD,
Robert E. Anderson, MD, and Earl R. Kern, PhD*
- 502 Cerebral Hemodynamics and Metabolism
in Postoperative Cerebral Vasospasm and
Treatment with Hypertensive Therapy
*Erwin B. Montgomery, Jr, MD,
Robert L. Grubb, Jr, MD, and Marcus E. Raichle, MD*
- 506 Preservation of the Phrenic
Motoneurons in Werdnig-Hoffmann Disease
*Shigeaki Kuzubara, MD,
and Samuel M. Chou, MD, PhD*
- 511 Baclofen in the Treatment
of Stiff-Man Syndrome
Frank Miller, MD, and Holly Korsvik, MS

Letters

- 513 Gaze Paresis in Amitriptyline Overdose
Peyton Delaney, MD, and Randall Light, MD
- 513 Variability of Charcot-Marie-Tooth Disease
Walter G. Bradley, DM, FRCP
- 513 Reply
Lowell L. Williams, MD
- 514 Retraction
*R. A. Pieter Kark, MD, David M. Becker, PhD,
and Susan Perlman, MD*
- 514 The Editor Edited
William M. Landau, MD
- 514 Reply
Fred Plum, MD

Regular Departments

- 515 Books

Neurological Progress

- 517 **The Ocular Motor System**
Robert H. Spector, MD, and B. Todd Troost, MD

Original Articles

- 526 **Complex Partial Status Epilepticus in Young Children**
M. C. McBride, MD, E. C. Dooling, MD, and E. Y. Oppenheimer, MD
- 531 **A Comparison of Stapedial Reflex Fatigue with Repetitive Stimulation and Single-Fiber EMG in Myasthenia Gravis**
Lynn D. Kramer, MD, Roger A. Ruth, PhD, Michael E. Johns, MD, and Donald B. Sanders, MD
- 537 **Saccadic Eye Movement Strategies in Patients with Homonymous Hemianopia**
Otmar Meinenberg, MD, Wolfgang H. Zangemeister, MD, Michael Rosenberg, MD, William F. Hoyt, MD, and Lawrence Stark, MD
- 545 **Prognosis of Optic Neuritis with Special Reference to Cerebrospinal Fluid Immunoglobulins and Measles Virus Antibodies**
Eeva Nikoskelainen, MD, Harry Frey, MD, and Aimo Salmi, MD
- 551 **Quantification of de Novo Central Nervous System IgG Measles Antibody Synthesis in SSPE**
Wallace W. Tourtellotte, MD, PhD, Booe I. Ma, PhD, D. B. Brandes, MS, MD, M. J. Walsh, MD, and Alfred R. Potvin, PE, PhD
- 557 **Characterization of Immune Complexes in Progressive Rubella Panencephalitis**
P. K. Coyle, MD, and Jerry S. Wolinsky, MD
- 563 **Myasthenia Induced by Monoclonal Anti-Acetylcholine Receptor Antibodies: Clinical and Electrophysiological Aspects**
Steven A. Burres, MD, John W. Crayton, MD, Christopher M. Gomez, BA, and David P. Richman, MD
- 569 **Viral Antibody Activity of Oligoclonal and Polyclonal Immunoglobulins Synthesized within the Central Nervous System in Multiple Sclerosis**
Björn Roström, MD, Hans Link, MD, Maria A. Laurenzi, MD, Slavenka Kam-Hansen, MD, Erling Norrby, MD, and Britta Wahren, MD
- 575 **Permanent Axotomy, a Model of Axonal Atrophy and Secondary Segmental Demyelination and Remyelination**
Peter James Dyck, MD, Alfred C. Lais, Jeannine L. Karnes, MS, Margaret Sparks, Heidi Hunder, BA, Phillip A. Low, MD, and Anthony J. Windebank, MRCP
- 584 **Adverse Effects of Phenobarbital on Morphological and Biochemical Development of Fetal Mouse Spinal Cord Neurons in Culture**
G. K. Bergey, MD, K. F. Swaiman, MD, B. K. Schrier, MD, PhD, S. Fitzgerald, MS, and P. G. Nelson, MD, PhD

- 590 **Prolonged Intracerebral Infection with Poliovirus in Asymptomatic Mice**
James R. Miller, MD

- 597 **Temporospatial Effects on Orthodromic Sensory Potential Propagation during Ischemia**
Viggo Kamp Nielsen, MD, and Troels Kardel, MD

Brief Communications and Case Reports

- 605 **Altered Muscle Polyamine Levels in Human Neuromuscular Diseases**
Anna M. Kaminska, MD, PhD, Lawrence Z. Stern, MD, and Diane Haddock Russell, PhD
- 607 **The Origins of Short-latency Somatosensory Evoked Potentials in Humans**
F. Mauguère, MD, and J. Courjon, MD
- 611 **Alpha-Pattern Coma in a 2-Month-Old Child**
Richard W. Homan, MD, and Mary Gene Jones, R EEG T
- 613 **Adult-onset Acid Maltase Deficiency Presenting as Diaphragmatic Paralysis**
Edward D. Sivak, MD, Virgilio D. Salanga, MD, MS, Asa J. Wilbourn, MD, Hiroshi Mitsumoto, MD, and Joseph Golish, MD

Conference Report

- 616 **Mechanisms of Virus Persistence**
Richard T. Johnson, MD, Robert A. Lazzarini, PhD, and Byron H. Waksman, MD

Notes and Letters

- 618 **Transient Ophthalmoparesis with Doxepin Overdosage**
Peter A. Lewitt, MD
- 618 **Monoamine Oxidase Activity in Normal and Alzheimer Brains**
John D. Dziedzic, PhD, Henryk M. Wisniewski, MD, PhD, and Khalid Iqbal, PhD
- 620 **Factor VIII and Thrombotic Stroke**
Thomas W. Furlow, Jr, MD
- 620 **Reply**
Bruce Furie, MD, and Ken Kosik, MD
- 621 **Enhanced Vascular Permeability in Acute Disseminated Vasculomyelinopathy**
Richard A. Rudick, MD, and Thomas A. Eskin, MD
- 621 **Reply**
Louis Reik, Jr, MD

Indexes to Volume 9

- 623 **Author Index**
625 **Subject Index**

Regular Departments

- 622 **Books**

SUPPLEMENT: GUILLAIN-BARRÉ SYNDROME CONFERENCE

- | | |
|---|---|
| <p>iii Preface</p> <hr/> <p>iv Participants</p> <hr/> <p>1 Diagnostic Considerations
in Guillain-Barré Syndrome
<i>Arthur K. Asbury, MD</i></p> <hr/> <p>6 Pathology of the Guillain-Barré Syndrome
<i>J. W. Prineas, MB, BS, FRCP(Edin), MRCP(Lond)</i></p> <hr/> <p>20 Electrophysiological Studies
in the Guillain-Barré Syndrome
<i>J. G. McLeod, MB BS, D Phil</i></p> <hr/> <p>28 The Physiological Basis
for Symptoms in Guillain-Barré Syndrome
<i>Austin J. Sumner, MD</i></p> <hr/> <p>31 Guillain-Barré Syndrome: Its Epidemiology
and Associations with Influenza Vaccination
<i>Lawrence B. Schonberger, MD,
Eugene S. Hurwitz, MD, Peter Katona, MD,
Robert C. Holman, MS, and Dennis J. Bregman, MS</i></p> <hr/> <p>39 A Molecular Approach
to the Diagnosis of Virus Infections
<i>Fred Brown, PhD</i></p> <hr/> <p>44 Role of Infection
in Guillain-Barré Syndrome: Laboratory
Confirmation of Herpesviruses in 41 Cases
<i>Peter C. Dowling, MD, and Stuart D. Cook, MD</i></p> <hr/> <p>56 The Protein Antigens
of Peripheral Nerve Myelin
<i>John N. Whitaker, MD</i></p> <hr/> <p>65 Cell-mediated Immunity
in Idiopathic Polyneuritis
<i>Aleem Iqbal, MD, Joel J.-F. Oger, MD,
and Barry G. W. Arnason, MD</i></p> <hr/> | <p>70 The Role of Autoantibody
and Immune Complexes in the Pathogenesis
of Guillain-Barré Syndrome
<i>Stuart D. Cook, MD, and Peter C. Dowling, MD</i></p> <hr/> <p>80 Immunological Characterization
of Sural Nerve Biopsies from Patients
with Guillain-Barré Syndrome
<i>Harald Nyland, MD, Roald Matre, MD,
and Sverre Mørk, MD</i></p> <hr/> <p>87 Experimental Allergic Neuritis
Induced by Galactocerebroside
<i>Takahiko Saida, MD, Kyoko Saida, MD,
Donald H. Silberberg, MD, and Mark J. Brown, MD</i></p> <hr/> <p>102 Marek's Disease: A Natural Model
for the Landry-Guillain-Barré Syndrome
<i>Jack G. Stevens, DVM, Jay S. Pepose, PhD,
and Margery L. Cook, PhD</i></p> <hr/> <p>107 Immunoregulation
<i>Joel D. Taurog, MD</i></p> <hr/> <p>117 Modulation of a Complex Immune System
<i>Alfred D. Steinberg, MD</i></p> <hr/> <p>125 Treatment of Acute
Inflammatory Polyneuropathy
<i>R. A. C. Hughes, MD, FRCP, M. Kadlubowski, PhD,
and A. Hufschmidt, MD</i></p> <hr/> <p>134 Chronic Relapsing (Dysimmune)
Polyneuropathy: Pathogenesis and Treatment
<i>Marinos C. Dalakas, MD, and W. King Engel, MD</i></p> <hr/> <p>146 Acute Polyradiculitis (Guillain-Barré
Syndrome): An Epidemiological Study
of 156 Cases Observed in Beijing
<i>Zhao Baoxun, MD, Yang Yinchang, MD,
Huang Huifen, MD, and Liu Xiuqin, MD</i></p> <hr/> |
|---|---|

